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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,906	09/28/2001	Linda Ann Roberts	36968/264493	4246
23552	7590	11/10/2003		
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903				
			EXAMINER PATEL, JAYANTI K	
			ART UNIT 2625	PAPER NUMBER
DATE MAILED: 11/10/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/965,906

Applicant(s)

ROBERTS ET AL.

Examiner

Jayanti K. Patel

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment filed 9/24/03.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's amendment/arguments filed September 24, 2003 have been fully considered but are not persuasive.
2. As to the applicants arguments regarding an apparatus for operating a home appliance using image processor that receives video signal have been fully considered but are not deemed to be persuasive. Contrary to the applicant's assertion, Kohler discloses a system for: "**Controlling appliances in home environments by gestures is step towards more intuitive and natural human computer interfaces**" (emphasis added) (Kohler, page 137, abstract, lines 1-3), "**Human computer interfaces based on visual input (video) have found growing interest during the last few years**" (emphasis added) (Kohler, page 137, Introduction, lines 1-3). Additionally, Kohler discloses a set of video cameras that are tracking moving objects using basic image acquisition modules to control home appliance such as TV, VCR, Lamp or Coffee maker (see figures 3 and 4). The specific operational details of such home appliance control system are being disclosed by Launey (figure 1, elements 22, 31, 38 and 40).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-10 are rejected under 35 U.S.C. § 103 as being unpatentable over Kohler ("System Architecture and Techniques for Gesture Recognition in Unconstraint Environments", M.R. J. Kohler, Virtual Systems and Multimedia, IEEE 1997, pages 137-146) in view of Launey et al. (US 5,086,385).

Regarding claims 1 and 9, Kohler discloses a system for controlling home appliances by gesture comprising:

an image receiver for receiving a continuous stream of gesture images of a gesture performed within a field of view of the image receiver (page 137, left column and page 139, figure 4 (a)); a system that receives the video signal corresponding to the continuous stream of gesture images and recognizes gesture based on information contained in the video signal (page 141, section 3, Object Recognition and Tracking);

a system for identifying a home appliance operation with the gesture (page 138, left column); an appliance controller coupled to the system for causing home appliance operation to be performed (page 140, Table 1).

Kohler discloses a generic home appliance controlling system without specific details regarding an image processor that receives a video signal.

In the same field of endeavor, however, Launey discloses a home automation system comprising an image processor that receives a video signal corresponding to home appliance control (column 11, lines 35-67 and figure 1, elements 10 and 26).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use an image processor as taught by Launey in the system of Kohler because it provides Kohler with a home automation appliance control system which is expandable and supports multiple numbers and different types of data communications interfaces.

As to claim 10, claim 10 is a method claim corresponding to apparatus claims 1 and 9 above and recite substantially very similar limitations and therefore is similarly analyzed as apparatus claims 1 and 9 above.

As to claims 2-3, while Kohler is silent about the specific details regarding a voltage generator generating a voltage signal and pulse, Launey discloses a home automation system that generates voltage signal and a pulse (column 9, lines 1-30).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a voltage generator as taught by Launey in the system of Kohler because it provides Kohler with a home automation appliance control

system which is expandable and supports multiple numbers and different types of data communications interfaces. Additionally, such appliance controllers are routinely designed to operate using voltage or current pulse signal.

As to claims 4-6, Kohler discloses the system that indicates the home appliance operation being performed and stores the representative gesture (page 139, figure 4(c) and page 140). All other limitations of claims 4-6 are similarly as claims 1-3 above.

As to claim 7, Kohler identifies the home appliance operation by comparing the recognized gesture with each of a predefined set of gestures (page 139, left column).

As to claim 8, while Kohler is silent about a switch coupled to the appliance, Launey discloses a switch coupled to the appliance adapted to be coupled to the home appliance, wherein switch is responsive for causing the home appliance operation to be performed (column 52, lines 18-45).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a switch coupled to the appliance as taught by Launey in the system of Kohler because it provides Kohler with a home automation appliance control system which is expandable and supports multiple numbers and different types of data communications interfaces. Additionally, appliance control switches are routinely used in home automation system for computer, remote or gesture controlled environment.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jayanti K. Patel whose telephone number is (703) 308-7728. The examiner can normally be reached on Monday-Friday (7:00-4:00), alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (703) 308-5246. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

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November 5, 2003

A handwritten signature in black ink, appearing to read 'Jayanti K. Patel', with a long horizontal stroke extending to the right.

Jayanti K. Patel
Primary Examiner